

WHAT IS CLAIMED IS:

1 1. A disk drive comprising a rotating magnetic media having tracks identified by
2 binary codewords, wherein each track codeword for a particular track within a contiguous band
3 of tracks differs from a track codeword for an adjacent track within the contiguous band of tracks
4 by a defined number N of bits, and differs from a track codeword for a nonadjacent track within
5 the contiguous band of tracks by at least the defined number N of bits, wherein the defined
6 number N of bits is greater than four such that at least two bit errors can be corrected when
7 reading a track codeword.

1 2. A disk drive as defined in claim 1, wherein each track codeword comprises 23
2 bits and the defined number N of bits is 7 bits.

1 3. A disk drive as defined in claim 1, wherein each track codeword comprises 15
2 bits and the defined number N of bits is 5 bits.

1 4. A disk drive as defined in claim 1, wherein the contiguous band of tracks
2 comprises between about 128 and 32,768 tracks.

1 5. A disk drive as defined in claim 1, wherein the contiguous band of tracks
2 comprises about 2048 tracks.

1 6. A method for identifying tracks on a rotating magnetic media of a disk drive,
2 comprising assigning each track within a contiguous bank of tracks with a unique binary
3 codeword such that each track codeword for a particular track within the contiguous band of
4 tracks differs from a track codeword for an adjacent track within the contiguous band of tracks
5 by a defined number N of bits, and differs from a track codeword for a nonadjacent track within
6 the contiguous band of tracks by at least the defined number N of bits, wherein the defined
7 number N of bits is greater than four such that at least two bit errors can be corrected when
8 reading a track codeword.

1 7. A method for identifying tracks as defined in claim 6, wherein each track
2 codeword comprises 23 bits and the defined number N of bits is 7 bits.

3 8. A method for identifying tracks as defined in claim 6, wherein each track
4 codeword comprises 15 bits and the defined number N of bits is 5 bits.

5 9. A method for identifying tracks as defined in claim 6, wherein the contiguous
6 band of tracks comprises between about 128 and 32,768 tracks.

7 10. A method for identifying tracks as defined in claim 6, wherein the contiguous
8 band of tracks comprises about 2048 tracks.